

SEQUENCE LISTING

<110> Republic of Korea represented by the president of Republic of National Fisheries Research and Development Institute

<120> Phytase produced from *Citrobacter braakii*

<130> 3p-02-25

<160> 8

<170> KopatentIn 1.71

<210> 1

<211> 1481

<212> DNA

<213> *Citrobacter braakii* YH-15

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<210> 2
<211> 10
<212> PRT
<213> Citrobacter braakii YH-15

<400> 2
Glu Glu Gln Asn Gly Met Lys Leu Glu Arg
1 5 10

<210> 3
<211> 12
<212> PRT
<213> Escherichia coli

<400> 3
Ser Glu Pro Glu Leu Lys Leu Glu Asn Ala Val Val
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<210> 4
<211> 15
<212> PRT
<213> Aspergillus ficuum

<400> 4
Phe Ser Tyr Gly Ala Ala Ile Pro Gln Ser Thr Gln Glu Lys Gln
1 5 10 15

<210> 5
<211> 15
<212> PRT
<213> Bacillus sp.

<400> 5
Ser Asp Pro Tyr His Phe Thr Val Asn Ala Ala Xaa Glu Thr Glu
1 5 10 15

<210> 6
<211> 1302
<212> DNA
<213> Citrobacter braakii YH-15

<220>
 <221> gene
 <222> (-1)..(1302)
 <223> phytase gene

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<210> 7
 <211> 433
 <212> PRT
 <213> Citrobacter braakii YH-15

<220>
 <221> PEPTIDE

<222> (1)..(433)
 <223> phytase

 <400> 7
 Met Ser Thr Phe Ile Ile Arg Leu Leu Ile Phe Ser Leu Leu Cys Gly
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 Ser Phe Ser Ile His Ala Glu Glu Gln Asn Gly Met Lys Leu Glu Arg
 20 25 30

 Val Val Ile Val Ser Arg His Gly Val Arg Ala Pro Thr Lys Phe Thr
 35 40 45

 Pro Ile Met Lys Asp Val Thr Pro Asp Gln Trp Pro Gln Trp Asp Val
 50 55 60

 Pro Leu Gly Trp Leu Thr Pro Arg Gly Gly Glu Leu Val Ser Glu Leu
 65 70 75 80

 Gly Gln Tyr Gln Arg Leu Trp Phe Thr Ser Lys Gly Leu Leu Asn Asn
 85 90 95

 Gln Thr Cys Pro Ser Pro Gly Gln Val Ala Val Ile Ala Asp Thr Asp
 100 105 110

 Gln Arg Thr Arg Lys Thr Gly Glu Ala Phe Leu Ala Gly Leu Ala Pro
 115 120 125

 Lys Cys Gln Ile Gln Val His Tyr Gln Lys Asp Glu Glu Lys Asn Asp
 130 135 140

 Pro Leu Phe Asn Pro Val Lys Met Gly Lys Cys Ser Phe Asn Thr Leu
 145 150 155 160

 Lys Val Lys Asn Ala Ile Leu Glu Arg Ala Gly Gly Asn Ile Glu Leu
 165 170 175

 Tyr Thr Gln Arg Tyr Gln Ser Ser Phe Arg Thr Leu Glu Asn Val Leu
 180 185 190

 Asn Phe Ser Gln Ser Glu Thr Cys Lys Thr Thr Glu Lys Ser Thr Lys
 195 200 205

 Cys Thr Leu Pro Glu Ala Leu Pro Ser Glu Phe Lys Val Thr Pro Asp
 210 215 220

 Asn Val Ser Leu Pro Gly Ala Trp Ser Leu Ser Ser Thr Leu Thr Glu
 225 230 235 240

 Ile Phe Leu Leu Gln Glu Ala Gln Gly Met Pro Gln Val Ala Trp Gly
 245 250 255

 Arg Ile Thr Gly Glu Lys Glu Trp Arg Asp Leu Leu Ser Leu His Asn
 260 265 270

 Ala Gln Phe Asp Leu Leu Gln Arg Thr Pro Glu Val Ala Arg Ser Arg
 275 280 285

Ala Thr Pro Leu Leu Asp Met Ile Asp Thr Ala Leu Leu Thr Asn Gly
290 295 300

Thr Thr Glu Asn Arg Tyr Gly Ile Lys Leu Pro Val Ser Leu Leu Phe
305 310 315 320

Ile Ala Gly His Asp Thr Asn Leu Ala Asn Leu Ser Gly Ala Leu Asp
325 330 335

Leu Lys Trp Ser Leu Pro Gly Gln Pro Asp Asn Thr Pro Pro Gly Gly
340 345 350

Glu Leu Val Phe Glu Lys Trp Lys Arg Thr Ser Asp Asn Thr Asp Trp
355 360 365

Val Gln Val Ser Phe Val Tyr Gln Thr Leu Arg Asp Met Arg Asp Ile
370 375 380

Gln Pro Leu Ser Leu Glu Lys Pro Ala Gly Lys Val Asp Leu Lys Leu
385 390 395 400

Ile Ala Cys Glu Glu Lys Asn Ser Gln Gly Met Cys Ser Leu Lys Ser
405 410 415

Phe Ser Arg Leu Ile Lys Glu Ile Arg Val Pro Glu Cys Ala Val Thr
420 425 430

Glu

<210> 8
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> primer for the detection of phytase gene

<400> 8
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30